

MSNseminars

presents

"Dissecting Opioid Circuits in Motivated Behaviors"

At 12:50 post docs and students are encouraged to come to
lunch to chat with our speaker and enjoy a **FREE PIZZA** lunch in Icahn 10-84.

Thursday, May 5th, 4pm

Location: Hess 9-101

*Everyone is invited to stay after the talk to join us for a
WINE & CHEESE reception on Hess 9th floor from 5-7pm.*

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The nucleus accumbens (NAc) and the dynorphinergic system are widely implicated in motivated behaviors. Prior studies have shown that activation of the dynorphin-kappa opioid receptor (KOR) system leads to aversive, dysphoria-like behavior. However, the endogenous sources of dynorphin in these circuits remain unknown. We investigated whether dynorphinergic neuronal firing in the NAc is sufficient to induce aversive behaviors. We found that hotostimulation of dynorphinergic cells in the ventral shell elicits robust aversive behavior and in contrast, stimulation of the dorsal shell is reinforcing. These results show previously unknown discrete subregions of dynorphin-containing cells in the NAc shell that selectively drive opposing behaviors. Understanding the discrete regional specificity by which NAc dynorphinergic cells regulate preference and aversion provides insight into motivated behaviors that are dysregulated in stress, reward, and psychiatric disease.



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